

## Chancellor Hogan Announces Retirement

*-After 25 Years at the Helm, He Plans to Leave in July*

In back-to-back faculty and staff gatherings on UML North and South, Chancellor William T. Hogan recently announced his plans to retire after 25 years at the helm of the University.

"I love my job. I have been fortunate to work with an incredible group of people, from those responsible for keeping the buildings running to the deans and vice chancellors. But, after 25 years, it is time to retire," he said.

After the addresses to nearly 500 members of the University community on both North and South, the chancellor received extended, standing ovations.

The time to retire is right, he said, because state funding is climbing and there is a new commitment at the State House to funding public higher education. He said the launching of two major projects — the five- to 10-year campus Transformation project and the \$266 million campus renovation plan — was a factor in his decision.

The Transformation strategic plan, first announced in 2003, "will change



▲ Chancellor William T. Hogan

the way we teach; change the way students learn; change what takes place on campus," Hogan said. It is designed to graduate students who "understand how the real world works," while reducing the cost of providing an educational unit.

The campus renovation master plan, announced last month, is designed to bring the University's

facilities into the next decade. "I was absolutely determined to get those two projects launched," he said.

Hogan said that, considering he will be 74 years old on his next birthday, it is "highly unlikely" that he would be able to stay to complete these projects, as he would be well into his 80s.

"I think it is in the very best interest of the campus and the university system to retire now so that the Board of Trustees can conduct a search that will attract a wide field of candidates, unlike what would happen if I were to stay for a few more years when the projects are half-complete," he said.

Hogan referenced some tough times, when state funding levels were down, as the most challenging for him as chancellor. He said the campus needed to cut payroll and redesign all administrative functions, and the campus employees responded by implementing changes. "I am so proud of what you people have done. You have changed Lowell into a very good institution."

Indeed, UMass Lowell has risen in the academic Carnegie rankings under Hogan's leadership, and he has led dozens of bold endeavors, including

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## Nano Industry Day Highlights Advances in Technology

*Great Minds Think Small in Research Presentations*

More than 100 representatives of businesses large and small came to Industry Day on April 28 to learn more about nanotechnology research on campus. Chancellor William T. Hogan welcomed the participants and Prof. Julie Chen of the Mechanical Engineering Department introduced to the UML NanoCenters (the interlocking Nanomanufacturing Center of Excellence and the NSF Nanoscale Science and Engineering Center for High-rate Nanomanufacturing).

Morning simultaneous sessions covered four areas, each with one faculty researcher presenting an overview and highlights of research projects. Poster sessions followed, so that industry representatives could discuss details with the researchers.

Joel Therrien, assistant professor of electrical and computer engineering, presented "Nanodevices," describing the issues in nanoelectronics, such as measurement of physical and chemical properties; creating the building blocks—nanotubes, nanoparticles, molecules and biomolecules—that are stable; and fabrication—finding processes with high through-put and chemically-driven assembly that can be proven on a large scale.

Chemistry Prof. Emeritus Arthur Watterson led the session on "Nanomedicine," organized into three sections: tissue engineering, such as polymer scaffolding; Smart Bandage® technology using an extracellular matrix with dramatic healing properties; and drug delivery innovations, such as nanoencapsulation, nanospheres and nanoemulsions, and drug-eluting stents.

"Nanomanufacturing" was presented by Prof. Joey Mead of the Plastics Engineering Department. She touched on the barriers to successful nanomanufacturing: how to assemble different nanoelements without physically placing them; how to manufacture nanoscale structures in a continuous process; how to test reliability and remove defects; and whether new processes require new ethical and regulatory assessment.

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## UML Announces 2006 Commencement Speaker

*Two Nobel Laureates to Receive Honorary Degrees*

The University of Massachusetts Lowell will have two Nobel Prize winners participating in this year's Commencement Ceremony on Sunday, June 4, at the Tsongas Arena.

Dr. Amartya Sen, a Lamont University professor and Professor of Economics and Philosophy at Harvard University, will deliver the 2006 commencement address. Sen is a Nobel Memorial Prize winner in economics whose books on economics and philosophy have been translated into more than 30 languages. He is also the former honorary president of OXFAM and is now its hon-

orary advisor. In addition to giving the commencement address, Sen will be awarded an honorary degree.

Also receiving honorary degrees are Dr. Susumu Tonegawa and David Pernick. Tonegawa is director of the Picower Institute for Learning and Memory at MIT. He was awarded the Nobel Prize in 1987. Pernick is president of Monarch Knitting Machinery Corp., which has offices in the U.S., Japan, England and Canada. He won the UML Distinguished Alumni Award in 1991.

Additionally, a number of awards at Commencement will recognize students for academic excellence and University service. A representative of the senior class also will address the Commencement gathering.

—JH



▲ Dr. Amartya Sen

### IN OTHER NEWS

#### Critical Issues Sessions —

Vice Chancellor Diana Prideaux-Brune says Critical Issues sessions have been "very useful."

#### Student Group Receives National Excellence Award

The Collegiate Chapter of MENC received the MENC National Collegiate Chapter of Excellence Award

**Online Auction**—Bidding has been fast and furious during the online auction to benefit the Costello Gym renovations.

To see these and other stories, go to UMass Lowell's new online eNews Web site at [www.uml.edu/enews](http://www.uml.edu/enews)



## Students Organize Workers' Memorial Day with MassCOSH

### *'Dying for Work in Massachusetts' Report Tallies Loss of Life and Limb*

**S**eventy-eight workers in Massachusetts lost their lives on the job in 2005, according to a report, "Dying for Work in Massachusetts: The Loss of Life and Limb in Massachusetts," that tallies deaths and work-related injuries. Worse, many work-related injuries are preventable.

The report was issued in conjunction with Workers' Memorial Day, observed on or about April 28. Sponsors included the Massachusetts AFL-CIO, the Massachusetts Coalition for Occupational Safety and Health (MassCOSH) and Western MassCOSH.

On campus, the observance was organized by undergraduate students in the "Politics of Health" course, taught by Asst. Prof. Craig Slatin of the Community Health and Sustainability Department. The students spent the semester immersed in issues of worker health and safety—hearing from labor leaders, talking with Labor Extension staff members, reviewing death certificates and critiquing newspaper coverage of death and injury.

"Some students even accompanied me on interviewing the mother of a man who died on the

job," says Slatin. "Others conducted interviews of workers made ill by working conditions. Many wrote letters to editors and several were published."

It was impressive work for junior-year students, all majors in community health education and nutrition. The class split into two teams: one to make suggestions for the "Dying for Work" report, the other to plan and lead the memorial event. Cheryl West, doctoral candidate in work environ-



▲ Carlos Eduardo Siqueira, left, presents a plaque to Fausto da Rocha, executive director of the Brazilian Immigrant Center.

ment, provided support and Marcie Goldstein-Gelb, director of MassCOSH, contributed classroom speakers.

The event included a student clarinet trio, readings of poetry and an address by Patrick Griffin, area director of the Occupational Safety and Health Administration (OSHA). Griffin has investigated more than 150 workplace fatalities and said, "Worker deaths should no longer be expected or accepted. ... Workers often don't know the conditions they are entering."

Carlos Eduardo Siqueira, assistant professor of community health and sustainability, presented a plaque to Fausto da Rocha, executive director of the Brazilian Immigrant Center. The award recognized the Center for its work to prevent and control workplace health and safety hazards faced by Brazilian immigrant workers in Massachusetts.



▲ Students of the "Politics in Health" course organized the Workers' Memorial Day event.

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## Chancellor Hogan Announces Retirement

formation of the School of Health and Environment, creation of the Department of Regional, Economic and Social Development, construction of the \$20 Million Recreation Center and partnerships with the City of Lowell on the building of the Tsongas Arena and LeLacheur Park.

"It is fair to say that Chancellor Hogan invented UMass Lowell and then reinvented the campus several times along the way," University of Massachusetts President Jack Wilson said. "Chancellor Hogan established the gold standard in terms of community involvement, building partnerships and bonds in Lowell and in the

Merrimack Valley that have brought economic success and social progress to the region."

Hogan ended his talks by praising the Lowell State House delegation for supporting legislation that will ensure increased public higher education funds from the Commonwealth. He lauded the bill's author, Lowell's Sen. Steven Panagiotakos, and said the Lowell delegation makes a "moral statement" by supporting that legislation.

"The future is as bright as it's ever been," he said.

—RC

## UML Campus Transformation Project

**T**he Workplace Quality Team is studying more sustainable campus practices. To read the whole story go to [www.Uml.edu/eNews](http://www.Uml.edu/eNews) for the next installment in a series on the Transformation teams' efforts.

## Speaker Believes Gays Will Achieve Civil Rights

### *Jacques Calls for More Activism at Conversation Dinner*

**N**ational activist and consultant Cheryl Jacques says that it may not happen in her lifetime, but within the lifetime of her and her partner's 4-year-old twin sons, gay civil rights will be won in the U.S.

"It's a matter of when, not if," Jacques, a former Massachusetts state senator, said at a recent conversation dinner sponsored by the Council on Diversity and Pluralism. She pointed out that the younger generation is "overwhelmingly supportive" of civil rights for gay, lesbian, bisexual and transgendered people.

Jacques said that there is growing acceptance of civil unions and gay marriage. When Vermont passed a civil union

law, for example, Gov. Howard Dean was placed under armed guard due to the threats against him for supporting it. Today, civil unions have been accepted, and several states are seeking to pass gay marriage laws similar to the one in Massachusetts — except without a court order demanding that they do so.

Jacques said the private sector is supporting nondiscriminatory policies. "More than half of Fortune 500 companies offer full benefits" for gay partners, she said. "They're doing it because they're doing what's best for corporate America."

While Jacques pointed out that time is on the side of those promoting gay civil rights, she challenged those present to do more. She urged closeted gays to come out; openly gay people to talk about it; and straight allies to write letters to the editor and to challenge discriminatory workplace practices.



▲ Nicole Champagne, left, co-chair of the Council on Diversity and Pluralism, joins former state senator and national gay civil rights leader Cheryl Jacques who spoke at a recent Conversation Dinner. They are joined by three who helped organize the Council-sponsored event, from right, Brenda Evans, director of the Office of Multicultural Affairs; Janin Duran, Criminal Justice graduate student; and Nicole Stewart, junior psychology and English major.

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# Green Chemistry Leads Lowell's Industrial 'Evolution'

*Earth Day 2006  
Celebrated at Revolving  
Museum*

**W**hat does the typical chemistry research group do on the weekend?

Normally, it's business as usual: checking instrumentation, doing chromatography and spectroscopy, or writing reports.

But not on Earth Day—Saturday, April 22—when the Center for Green Chemistry mounted a major presentation at Lowell's Revolving Museum. Titled "Lowell's Industrial Evolution," the free evening event included 23 original exhibits about green chemistry and research projects designed to make the subject understandable to the public.

Visitors were welcomed to multimedia presentations and hands-on experiments, along with refreshments and the music of the local vocal group, Aksara. Two dozen graduate students, staff and associates of the Center showed their work.

Prof. John Warner, director of the Center for Green Chemistry, led the effort to make the research technology and its environmental importance accessible to local citizens. The Revolving Museum—a public art space fostering interdisciplinary collaboration in its mission of education and urban redevelopment—was an ideal location.

"The first industrial revolution a few centuries ago served to separate society



▲ Visitors to the Green Chemistry exhibit at the Revolving Museum try out the interactive activities.

from technology," says Warner. "This (green chemistry) revolution sees them coming back together again."

The Earth Day exhibits covered a wide variety of research areas, from bioinspired photopolymers to plastics based on biomass, the life cycle of electronic wastes and improving the bioavailability of pharmaceuticals. Visitors could make their own solar cells, create images using photopolymers and ultraviolet light and paint with materials that change color in different light. The "Clickable Principles" website gave a guided tour through the principles of Green Chemistry with applications in the home and in the lab.

# Transfer Entry Process Revised

*Process Becoming Easier  
for Transfers, More  
Collaborative for Staff*

**I**t's the details that make the difference.

That was one of the conclusions of the survey completed last fall by students transferring into UML. So this spring, the Enrollment and Student Success team has been working to fine tune the elements of the enrollment process that caused problems for last year's transfers.

"This is a very important population for us," says Tom Taylor, dean of Enrollment and Student Success. "It's also a population that comes with lots of complexities in its records. Each piece of the process that gets changed has multiple ramifications."

In order to smooth out processing of some of those complexities, the first problem identified was to make orientation more accessible—and mandatory—for transfer students. Karen Humphrey-Johnson, director of Orientation and First Year Programs, has scheduled six mini-orientation sessions for transfers during May to supplement those already scheduled for June, July, and August. The sessions are scheduled at morning, afternoon and evening times, so they will be as accessible as possible.

The sessions will provide transfer students with essential information and capabilities, ranging from the UML definitions of "CLASS" and "SIC" to using their ID number to access the self-service pages in ISIS. Orientations will be followed by individual advising sessions with faculty from the student's major. Colleges have been very cooperative in making advisors available, Taylor reports.

One advantage of this new approach is that transfer students can register while there are greater choices in classes. Last year, because of some

combination of time-consuming procedures, inflexible technology and procrastination, transfer students registering in August found that a number of their courses were already closed.

When trying to change a process, Taylor notes, "you cannot assume anything will work until you get everyone involved in that process in one room to discuss it."

There have been many of those "all in one room" discussions this spring as staff members of the Registrar's Office, Financial Aid, Student Billing and Admissions made good use of their own transition from initial to experienced users of PeopleSoft.

"We've used the student records module of PeopleSoft for one year and we better understand its capabilities and limitations," Taylor says. "Now we are ready to find ways to expand its functionality for our particular campus."

Taylor is optimistic about the implications of the problem-solving culture that emerged this spring.

"The next step," he says, "will be to move toward a paperless process for transfers with the purchase of imaging software. By the time we have that in place, we'll be old hands at working together to get the most out of the technology."



▲ Jerry Durkin, left, director of transfer admissions and Tom Taylor, dean of Enrollment and Student Success.

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## Nano Industry Day Highlights Advances in Technology

Work Environment Prof. Michael Ellenbecker presented the session on "Environmental Health and Safety Issues With Nanotechnology." He gave an overview of various research activities in environmental and occupational areas, including issues of concern in worker exposure to nanoparticles and current uncertainties of what levels might have toxic consequences, as well

as the positive aspects of using nanoparticles to replace toxic materials in industrial settings.

The day ended with lab tours and further opportunities for networking. The event was organized by Dr. Anne-Marie Baker, industrial liaison to the NanoCenters.

—SS



▲ Prof. Julie Chen welcomes visitors to Nano Industry Day.



▲ Prof. Carol Barry, right, discusses research with Chris Thellen from the U.S. Army Natick Research Labs.

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## Luggage Executive Offers Hope to Late Bloomers

Pulichino credits his Lowell Tech education for helping him tap his full potential. "I wasn't a great student, but I did learn how to apply the skills I learned in the classroom into my business life," he said. "The basic skills set you develop early in life can be with you forever."

He advised students to focus on personal satisfaction in a career, rather than just money and power. Finding a mentor is also essential, he said.

"Success is always a question of definition. The earlier in life you can come up with that definition, the easier it will be to meet these goals," Pulichino said.

Sponsored by the Office of University Advancement and the College of Management, the Senior Executive Forum offers students and faculty a unique opportunity to engage in informal discussion with accomplished executives.



# Alkim Akyurtlu Pushes Boundaries of Research

*Metamaterials Show Novel Properties, Don't Exist in Nature*

**D**r. Alkim Akyurtlu is interested in research that touches the far boundaries of what's knowable. And then she likes to incorporate that knowledge into her courses.

Research and teaching comprise the academic life—a combination that Akyurtlu, assistant professor of electrical and computer engineering, finds especially rewarding, even in comparison to her previous work at MIT Lincoln Labs. UMass Lowell also offers many opportunities for collaborative research, leading her in new directions.

"My main expertise is in computational electromagnetics," says Akyurtlu. "I'm more theoretical and (in my collaborations) I'm becoming involved in the experimental aspect of the research, which forces me to face the 'real world' challenges. It's fun to go beyond theory to see if what we've predicted will happen."

Akyurtlu is putting theory and experiment together in exploring materials that don't exist in nature—metamaterials—to understand and demonstrate their novel properties. Metamaterials invert the two fundamental properties of material, namely the permittivity (electrical response) and permeability (magnetic response). These properties are simultaneously negative and therefore show a negative index of refraction, so materials with these properties are commonly named negative index metamaterials, or NIMs.



▲ Alkim Akyurtlu

In explaining the fascination of NIMs, Akyurtlu says, "Water exists in nature and has certain properties with which we're familiar. Put a stick in a glass of water and the light refracts, the stick appears to bend in predictable ways. Put NIMs instead of water into a glass and a stick will appear to bend in the opposite direction." These materials not only result in the reversal of Snell's Law (on light refraction) but also of the Doppler Effect, which can lead to interesting military applications.

Most exciting, conceivably one could construct a perfect lens in which a mere slab of material can focus light.

"A perfect lens can produce a sub-wavelength image," says Akyurtlu. "It provides the possibility for high-resolution lenses that can resolve details finer than the wavelength of light. But no one has yet demonstrated a perfect lens."

Metamaterials consist of conducting resonance structures that are embedded in or deposited on a non-conducting substrate; the size and configuration of the inclusions determines the frequency of transmission. When the largest size of the inclusions and their period is less than the wavelength of light, the material appears as a bulk medium.

Akyurtlu is working on two research projects funded by the Air Force Office of Scientific Research. The first involves improving antennas through integration of metamaterials within the antenna itself; rather than having a wire and separate electronics, the antenna itself acts as a filter. The research uses inclusions in the microwave range to increase the bandwidth and miniaturize the antenna size. These "patch" antennas are compact and often used in automobile and space applications. The mathematical theory of antennas is complex and Akyurtlu teaches a course in the subject, as well as courses in radar systems and engineering math.

The second Air Force-funded project is to develop NIMs in the area of visible light, something that has never been done. Akyurtlu and her team have developed a novel structure using nanoscale-size spherical inclusions, but the key issue is to prove the concept.

"The measurement of phase change is very difficult," says Akyurtlu, who is working with Physics Profs. William Goodhue and Aram Karakashian on building a test bed for characterization of metamaterials. "Moreover, the equipment is very expensive: One piece I was looking into buying is around \$100,000."

Testing is critical: "The test bed is part of the proof," she says. "We would be the first to show NIM effects in the visible regime."

Akyurtlu supervises five doctoral candidates, two of whom will graduate this summer. She is married, lives in Arlington and has a 15-month-old daughter, whom she describes as "my inspiration!"

# Luggage Executive Offers Hope to Late Bloomers

*Pulichino '67 Gives Last Senior Executive Forum Talk*

**J**ohn Pulichino '67 offers hope to hard-working students who may not follow a classic track to business success. During the final talk of the Senior Executive Forum, the former president and CEO of American Tourister admitted he was an average student without clear career direction, until a mentor helped him realize his true strengths.

"I was a late bloomer," he told about 100 finance and management student in the audience. "But if you believe in yourself and set



▲ During the last Senior Executive Forum, John Pulichino '67, former president and CEO of American Tourister, advised students to focus on personal satisfaction in a career.

attainable goals, it's amazing how it will all come together for you."

Pulichino was working at Polaroid Corporation as director of industrial engineering in the late 1970s when he made a career decision that affected the rest of his life. He took his operations skills to American Tourister, and in two years, became president and CEO of the company. During his 14 years at American Tourister, he grew the company's sales from \$30 million to \$150 million before the company was sold to its competitor, Samsonite.

"I never really understood it, but things always seemed to turn out the way I envisioned them," Pulichino said of his late-discovered skill.

At American Tourister, he capitalized on the company's strengths by focusing on specialty products, such as video camera bags and laptop cases, and opening 100 factory outlet stores in three years, despite fears that core customers would feel alienated.

After the company was sold, he left to tackle his next challenge, merging two different chains of specialty luggage stores in the New York City area into a company called Innovation Luggage, Inc.

The 140-store chain prospered until Sept. 11, 2001, when the terrorist attacks on the World Trade Center sunk all business related to travel. His company had a store within the World Trade Center, but the employees escaped unharmed.

"A company that had done so well went into a tailspin. In four days, revenue dropped in half and stayed that way," said Pulichino. "It had a rippling effect on the U.S. economy. People stopped traveling."

After several tight years, Innovation

Luggage had just started rebounding when he sold the business, once again to Samsonite. With his wife and business partner, Joy, he now leads Group III International Ltd., a wholesale travel goods company specializing in the Swiss Army brand. His company pays a licensing fee to design and market items that are approved by Swiss Army through a rigorous oversight process. Domestic sales have reached \$50 million with a worldwide rollout in the near future.

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